FIG. 1(A)

FORMATION OF INSULATING LAYER 101a

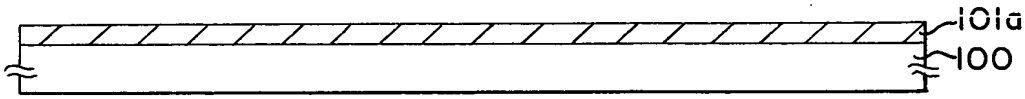


FIG. 1(B)

SEQUENTIAL FORMATION OF INSULATING LAYER 101b AND SEMICONDUCTOR FILM

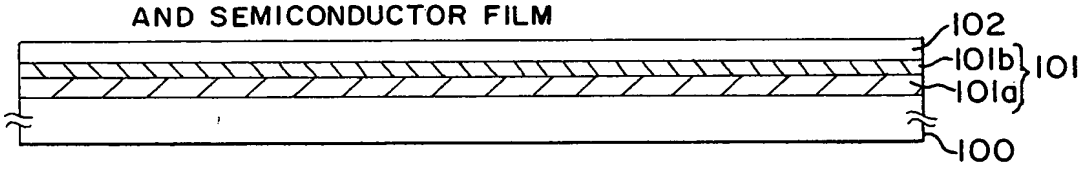


FIG. 1(C)

CRYSTALLIZATION

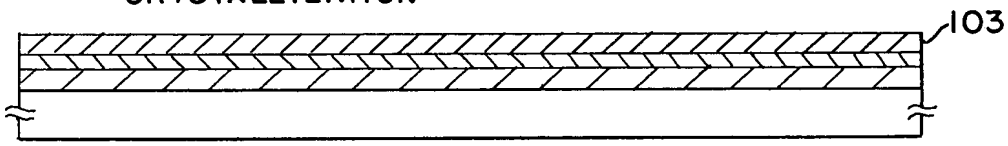


FIG. 1(D)

FORMATION OF ACTIVE LAYER AND GATE INSULATING FILM

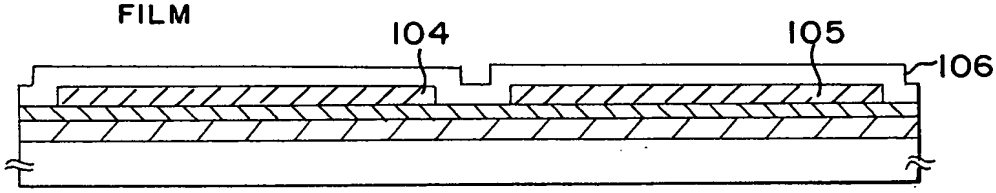


FIG. 1(E)

FORMATION OF GATE WIRING

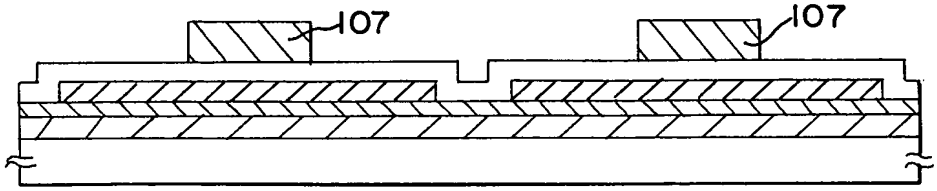


FIG. 2(A)

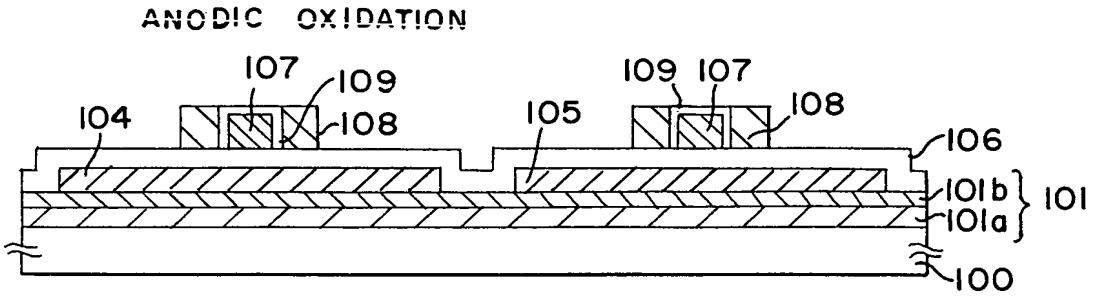


FIG. 2(B)

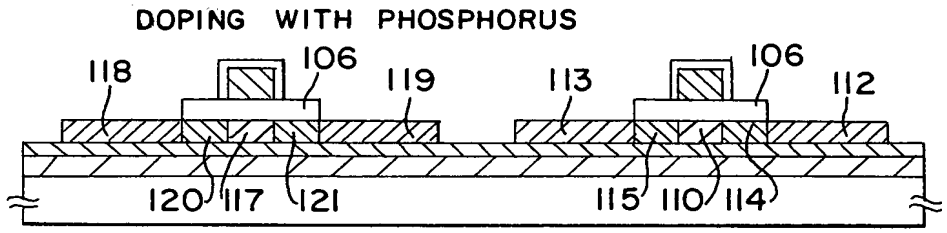


FIG. 2(C)

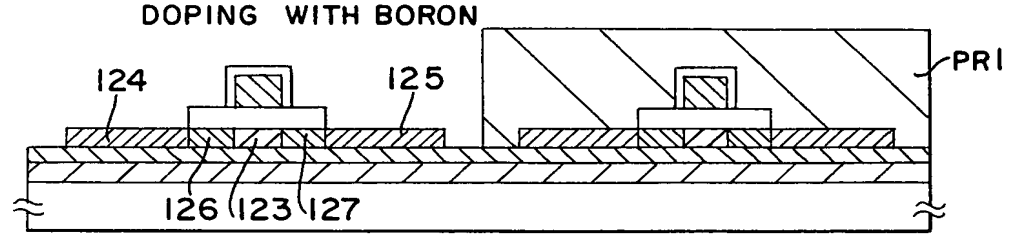


FIG. 2(D)

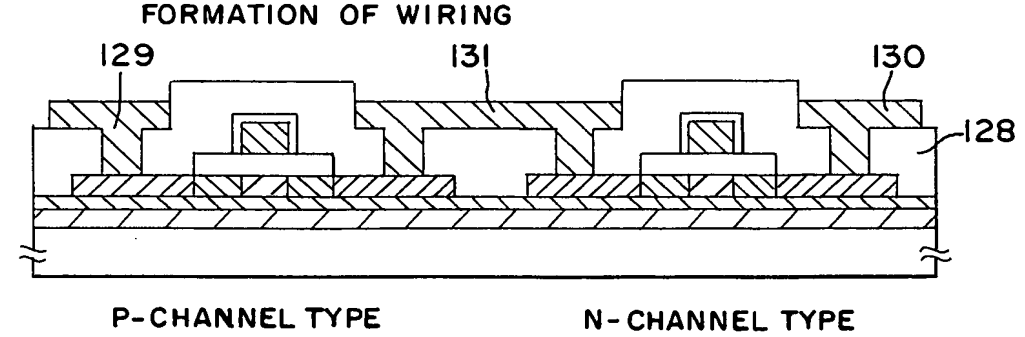


FIG. 3

		SUBSTRATE 1	SUBSTRATE 2	SUBSTRATE 3	SUBSTRATE 4
FLOW RATE OF RAW MATERIAL GAS	SiH_4	4		10	15
	N_2O	400		20	20
	NH_3	0		100	200
HEAT TREATMENT		CONDUCTED	NO	NO	NO
COMPOSITION RATIO (ATOMIC %)	N	7.0		24.0	44.1
	O	59.5		26.5	6.0
	Si	32.0		33.0	34.4
	H	1.5		16.5	15.5
REFRACTIVE INDEX		1.4566		1.7468	1.7975

FILM FORMING CONDITIONS AND PHYSICAL PROPERTIES OF INSULATING LAYER (SILICON OXIDE NITRIDE LAYER) 101a

FIG. 4(A)

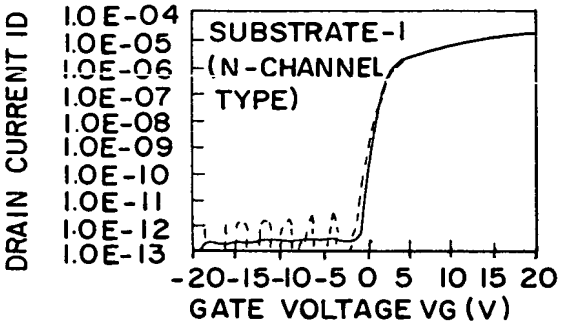


FIG. 4(B)

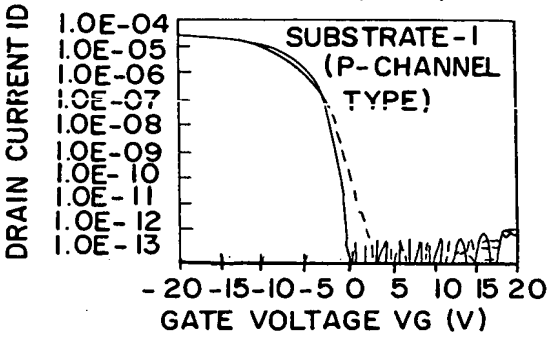


FIG. 4(C)

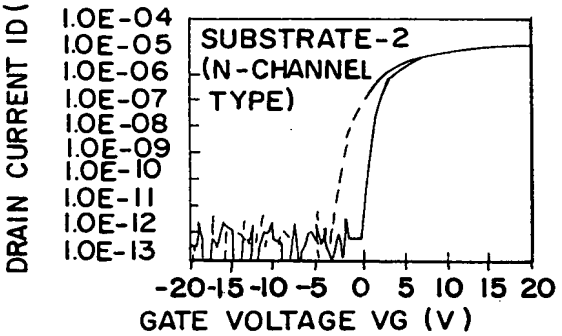


FIG. 4(D)

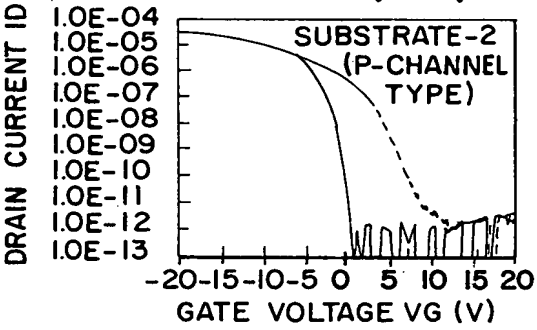


FIG. 4(E)

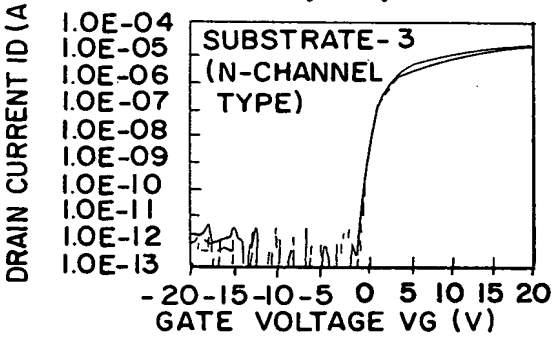


FIG. 4(F)

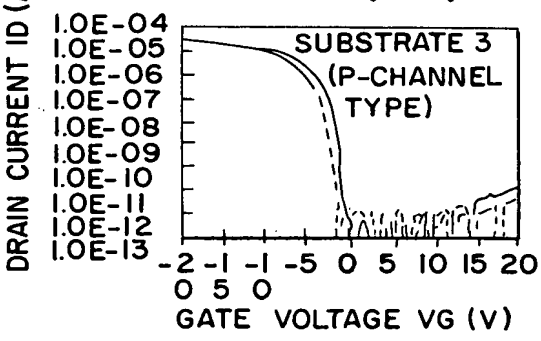


FIG. 4(G)

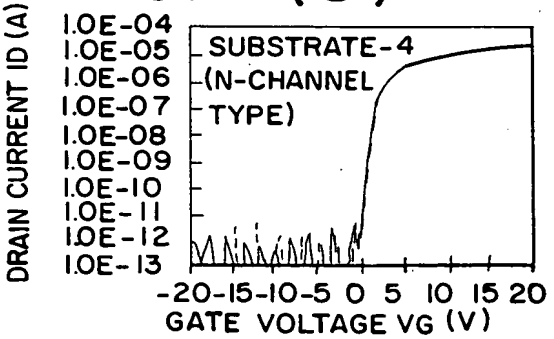


FIG. 4(H)

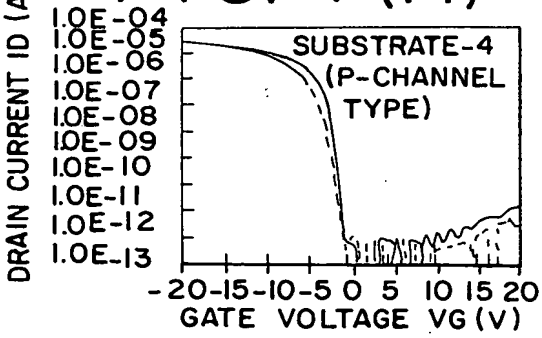


FIG. 5A

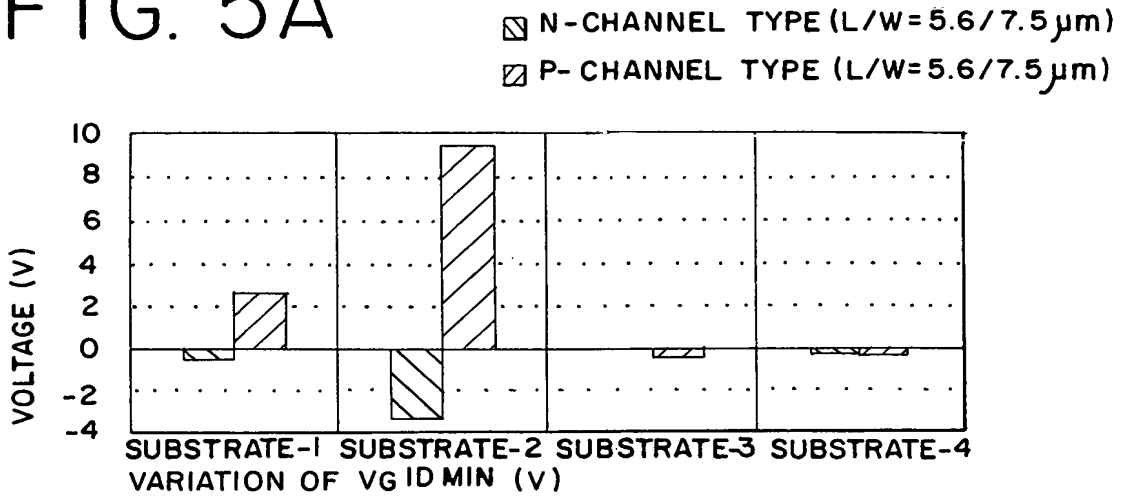


FIG. 5B

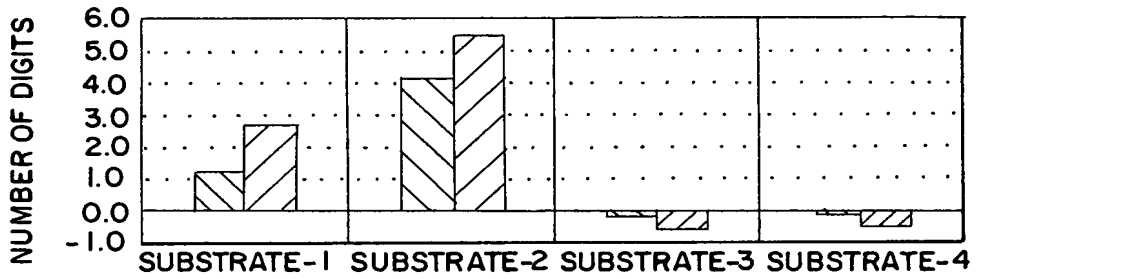
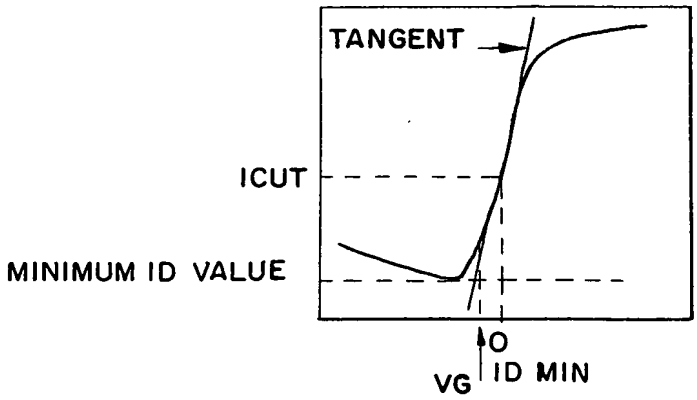


FIG. 5C

CHANGE OF NUMBER OF DIGITS OF I CUT

※ STRESS CONDITIONS
150°C, 1 HOUR, VG: 20V(N-CHANNEL TYPE), -20V(P-CHANNEL TYPE),
VD=VS=0V



ID-VG CHARACTERISTIC CURVE

FIG. 6

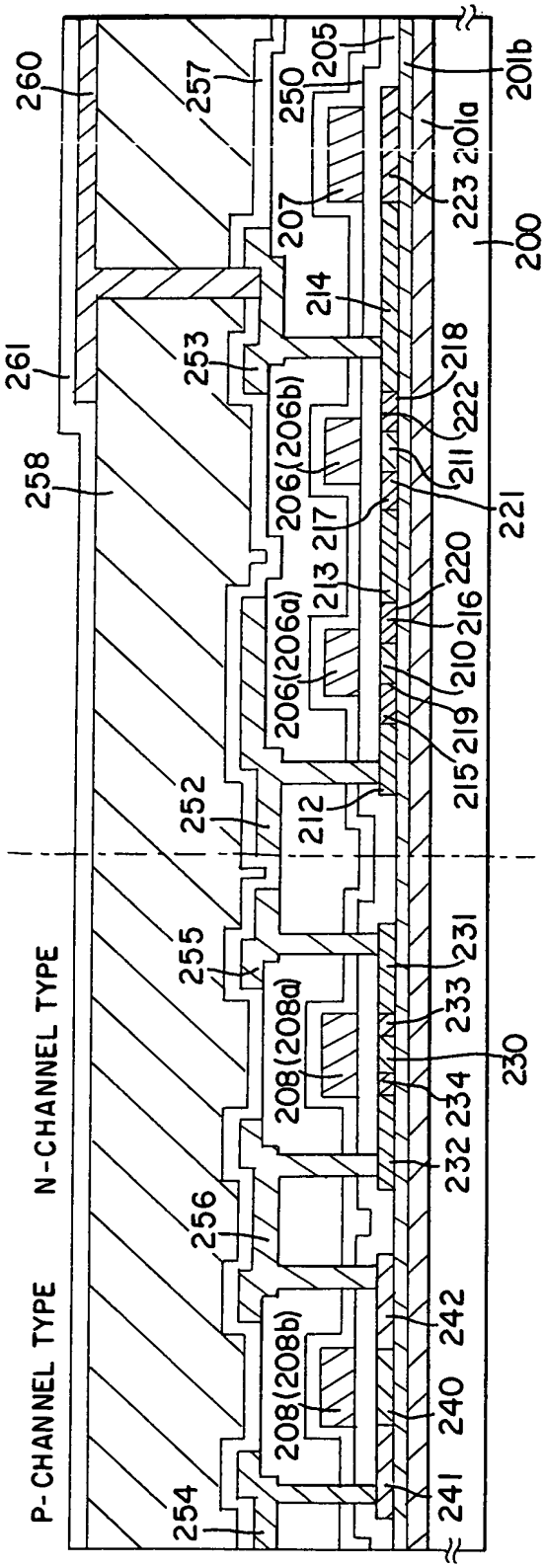


FIG. 7 (A)

FORMATION OF UNDERLYING FILM, ACTIVE LAYER AND GATE INSULATING FILM

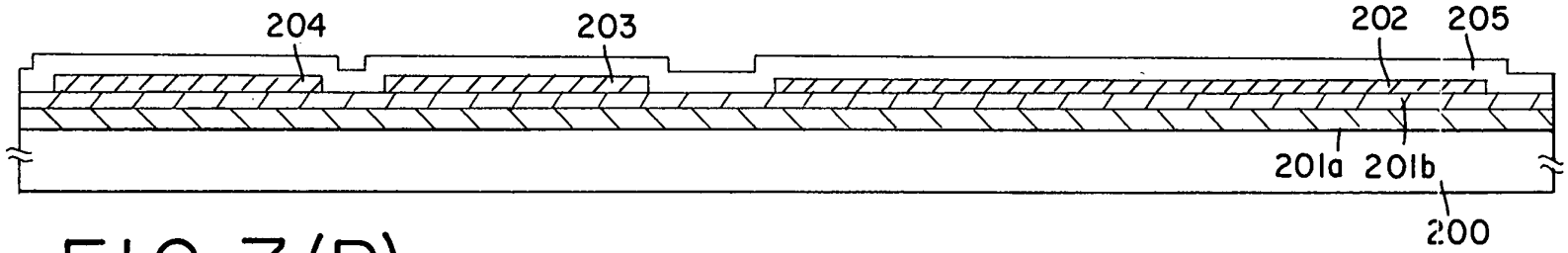


FIG. 7 (B)

DOPING PROCESS OF PHOSPHORUS (FORMATION OF n^--TYPE REGION)

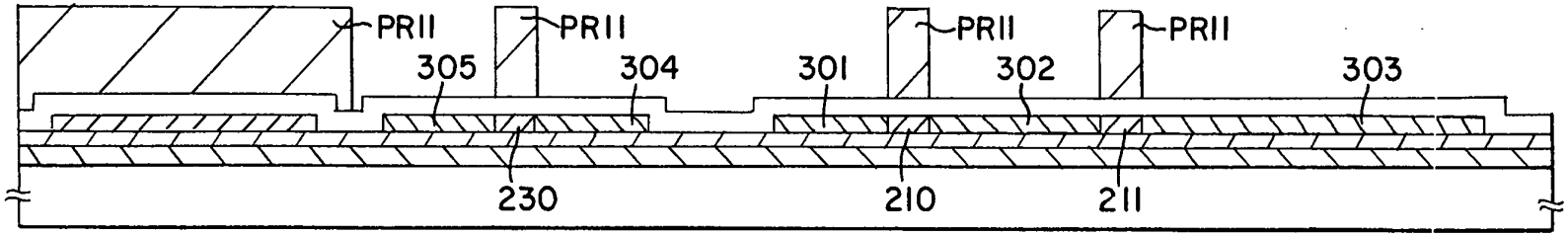


FIG. 7 (C)

FORMATION OF CONDUCTIVE FILM

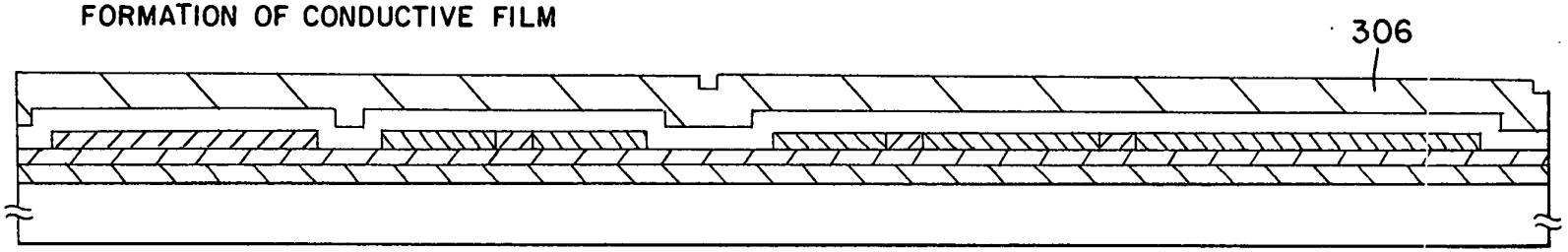


FIG.8(A)

DOPING WITH BORON (FORMATION OF P+-TYPE REGION)

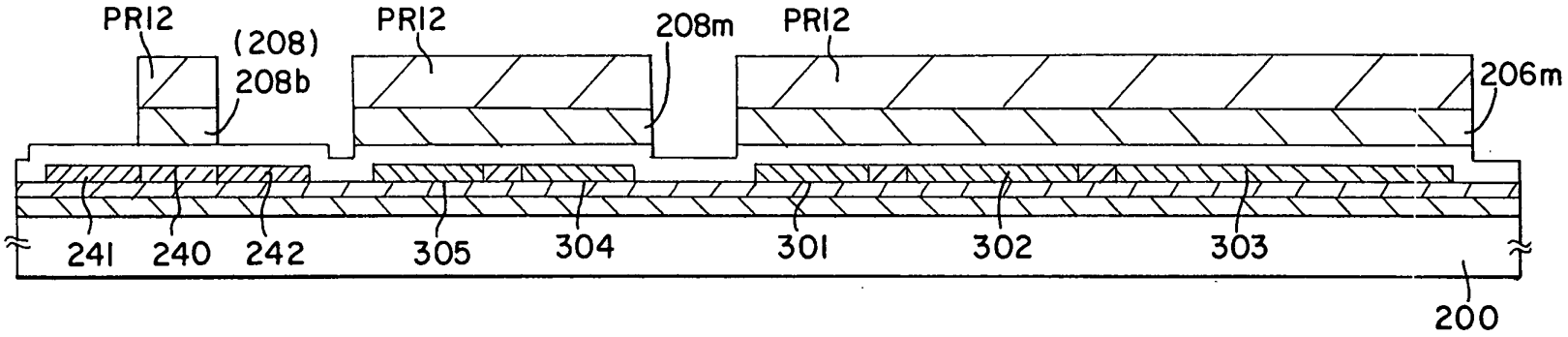


FIG.8(B)

FORMATION OF WIRING

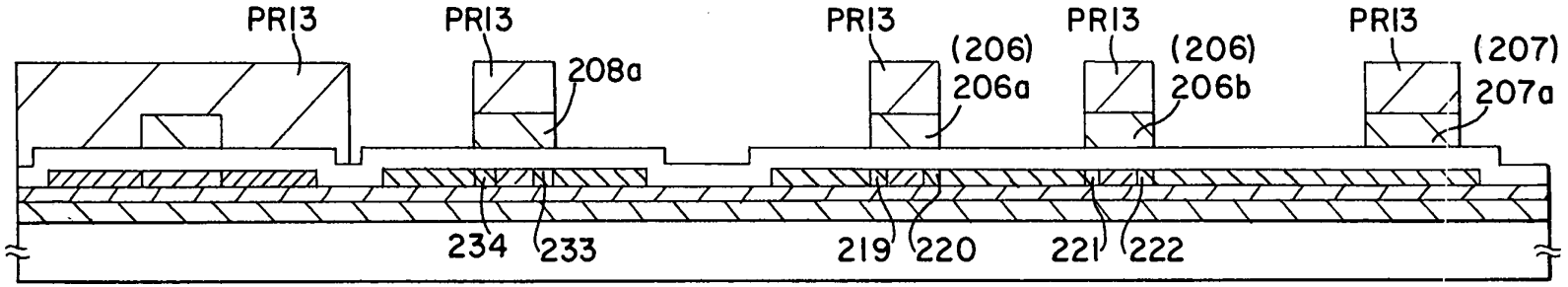


FIG. 9(A)

DOPING WITH PHOSPHORUS (FORMATION OF n+- TYPE REGION)

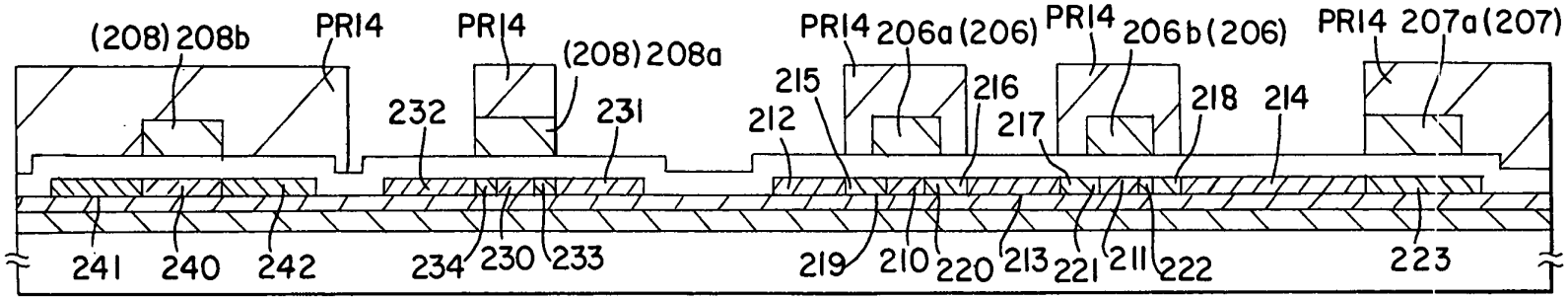


FIG. 9(B)

FORMATION OF WIRING AND ELECTRODE

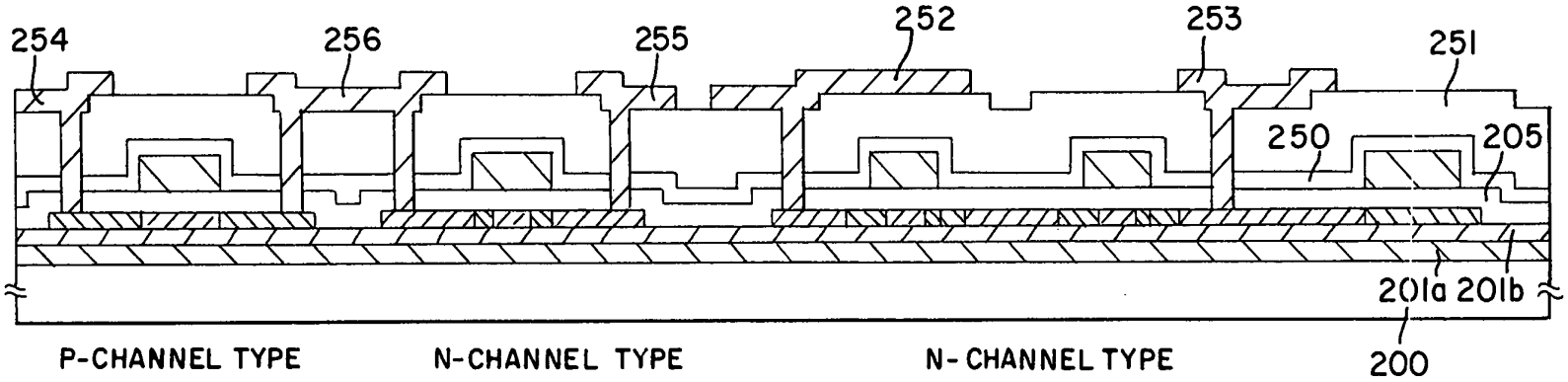
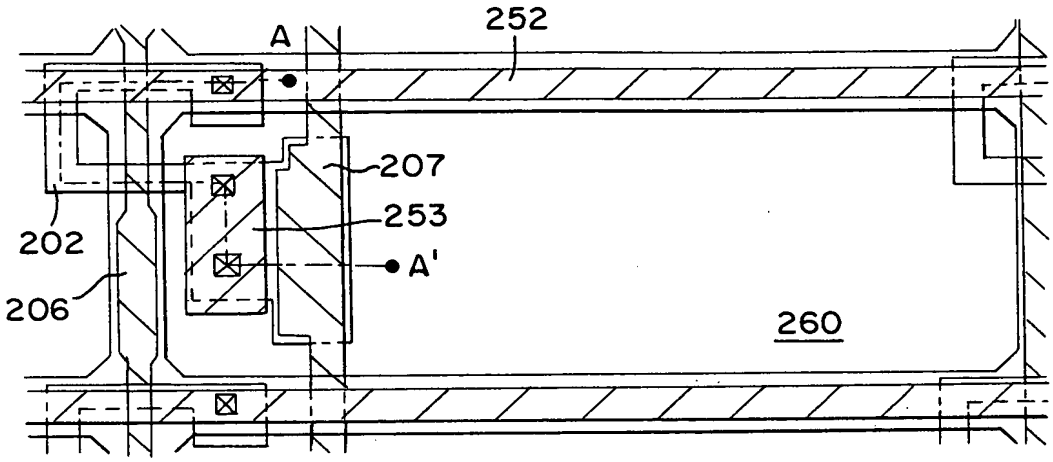


FIG. 10



PLAN VIEW OF PIXEL MATRIX CIRCUIT

FIG. 11

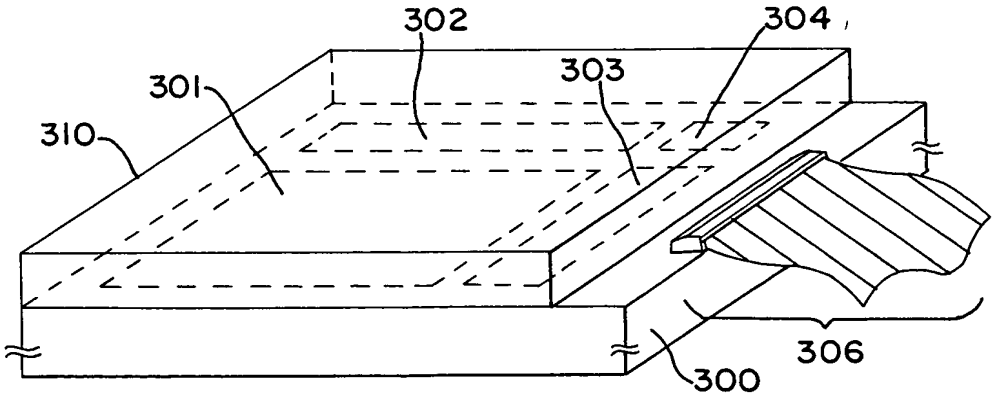


FIG. 12(A)

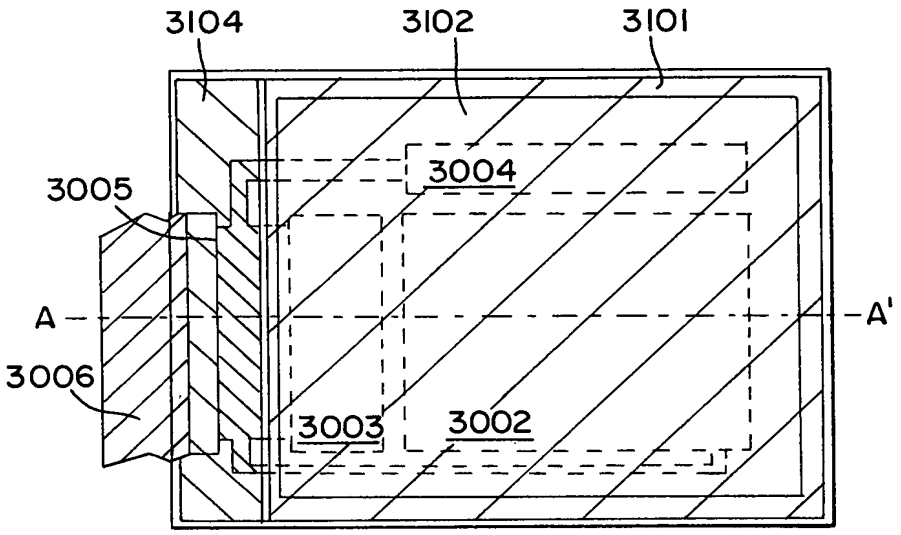


FIG. 12(B)

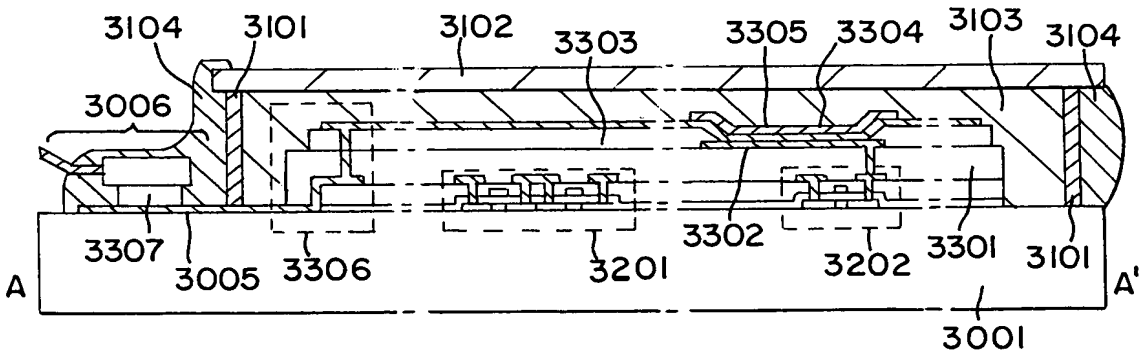


FIG. 13(A)

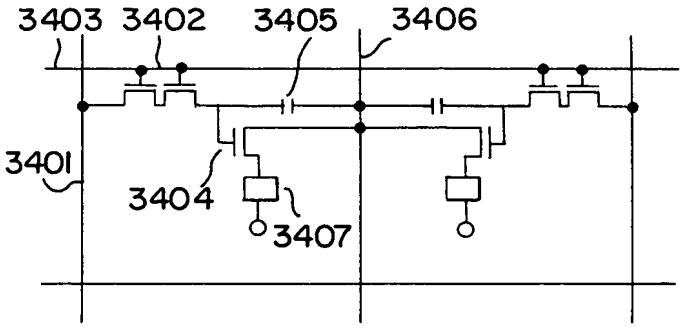


FIG.13(B)

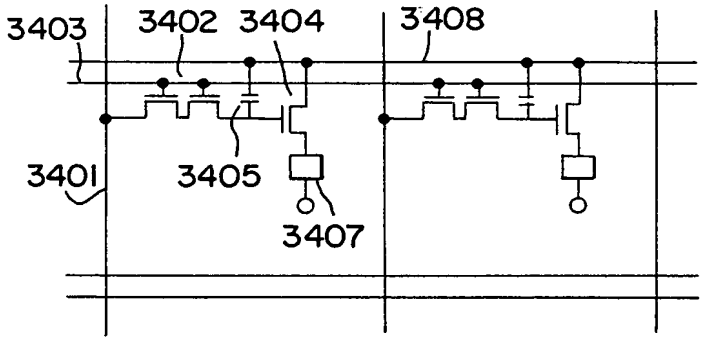


FIG.13(C)

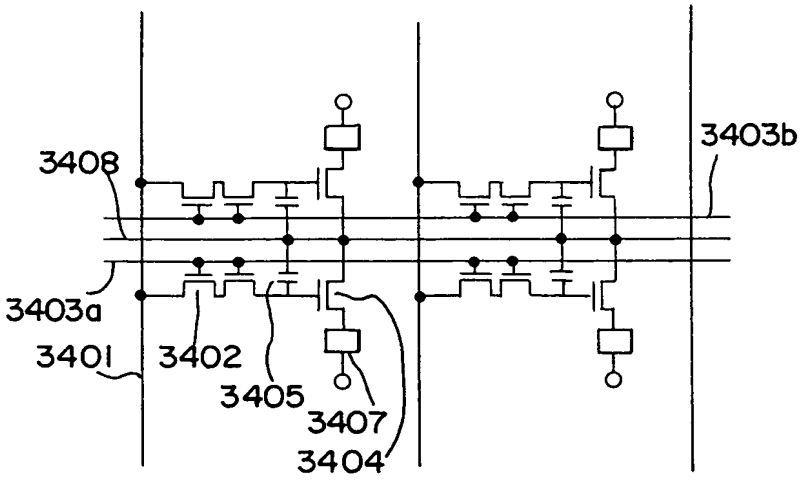


FIG. 14(A)

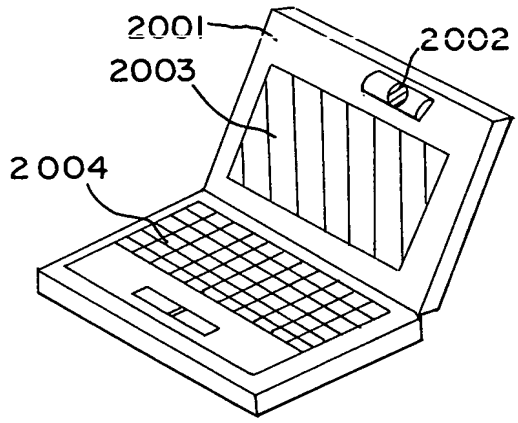


FIG. 14(B)

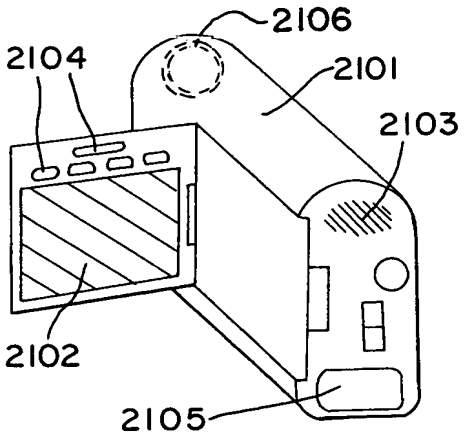


FIG. 14(C)

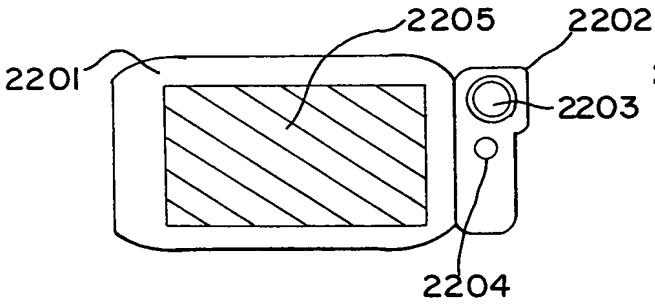


FIG. 14(D)

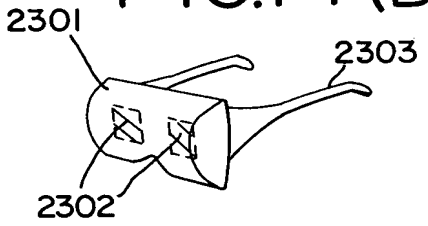


FIG. 14(E)

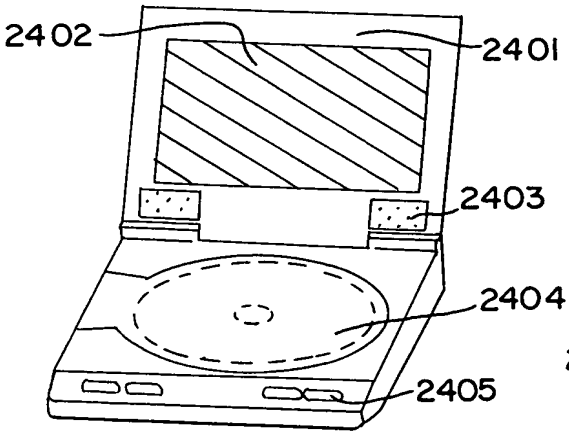


FIG. 14(F)

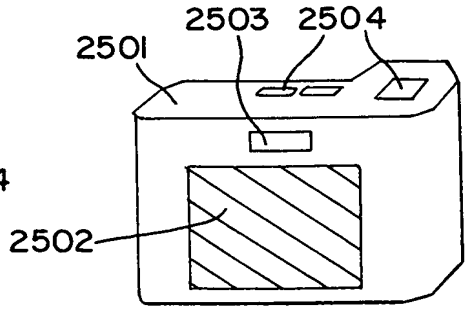


FIG. 15(A)

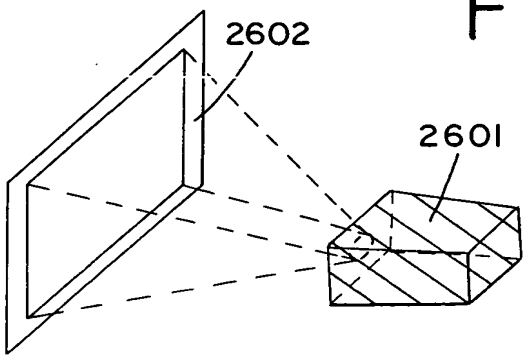


FIG.15(B)

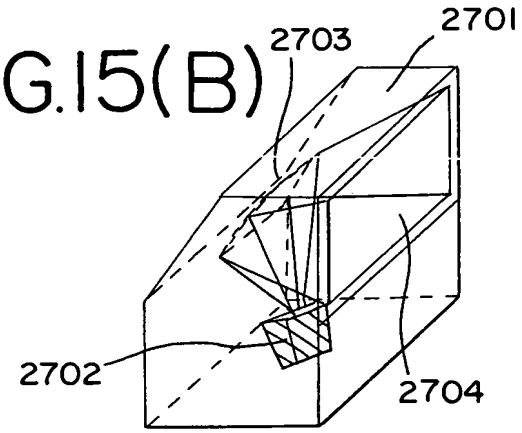


FIG.15(C) PROJECTION UNIT (THREE-LENS TYPE)

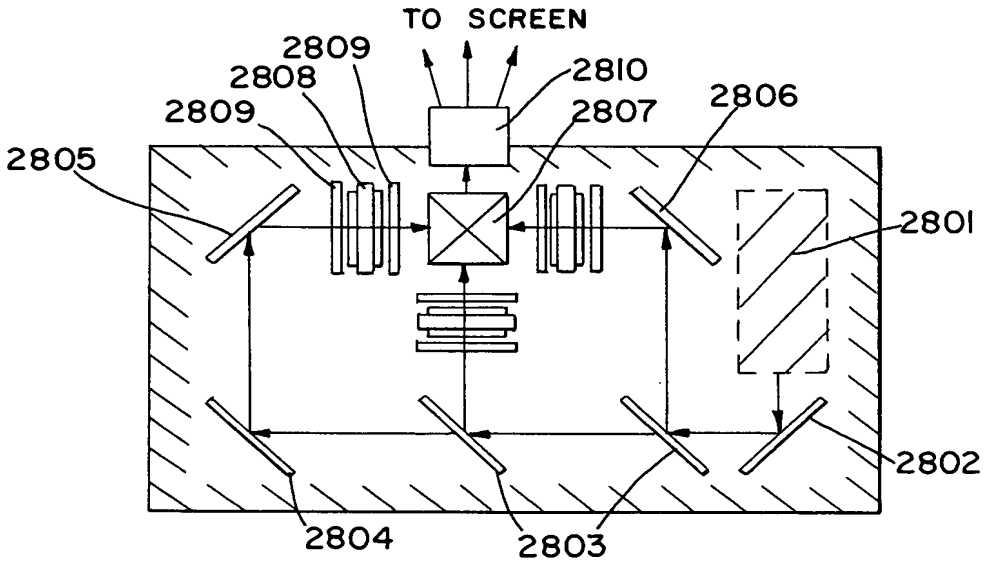


FIG. 15(D)

LIGHT SOURCE OPTICAL SYSTEM

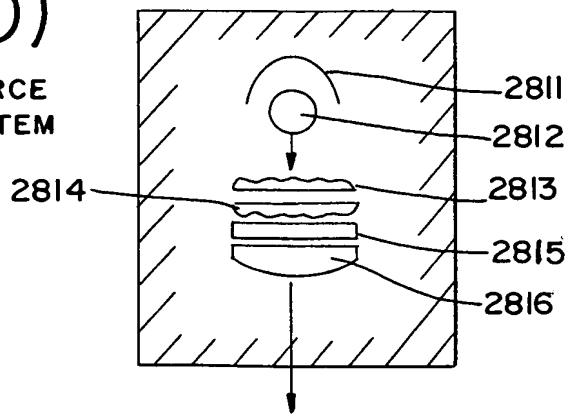


FIG. 16(A)

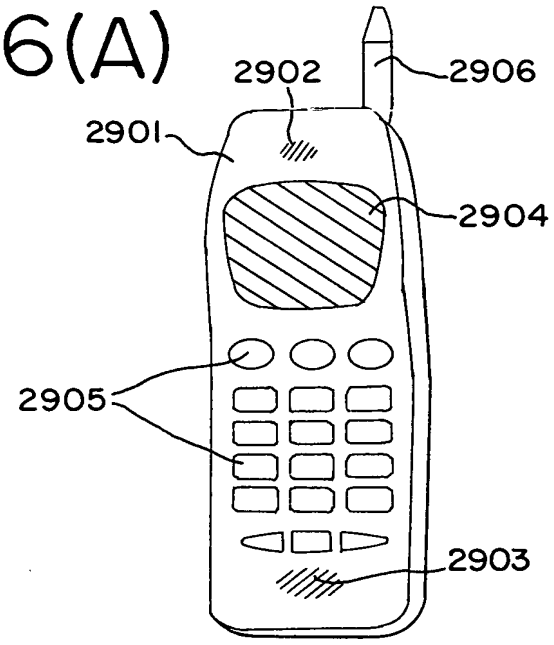


FIG. 16(B)

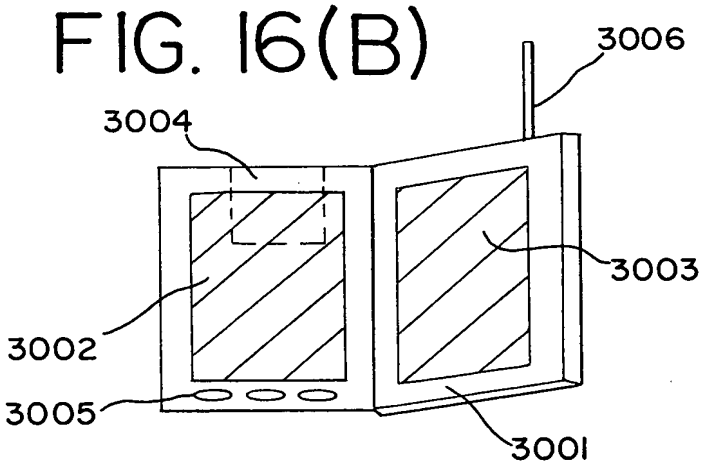


FIG. 16(C)